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November 8, 2011

Mr. David Szymanski
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-7011

**RE: 2011 Periodic Review Report
Mineral Springs Road Former Manufactured Gas Plant Site**

Dear Mr. Szymanski:

National Fuel Gas Distribution Corporation (NFG) completed construction on the remedial action for the Mineral Springs Road Former Manufactured Gas Plant (MGP) site in 2001. Since then, NFG has performed operations and maintenance (O&M) activities for the remedy in accordance with the Final Engineering Report, Volume II – Operations and Maintenance (O&M) Plan, dated May 2002 (O&M Plan) for the project. Those activities have included preparation of annual O&M Reports, which have been submitted since 2002. Because of changes in NYSDEC reporting requirements, AECOM has prepared this Periodic Review Report (PRR) on behalf of NFG rather than an O&M Report to meet the reporting requirements of the O&M Plan.

1. Introduction

The former Mineral Springs MGP was built in the early 1920's and was operated until the 1960's. Coal and oil gasification wastes, particularly coal tar hydrocarbons and blue-stained purifier residuals, were generated during operation of the plant. Investigations have been performed to evaluate environmental conditions at the site. Those investigations identified impacts to soil and groundwater by MGP residues, including organic constituents, dense non-aqueous phase liquids (DNAPL), and cyanide. Remedial activities including excavation, capping, DNAPL recovery, and institutional controls have been performed since 1997 to address these impacts.

This PRR presents and evaluates the results of O&M activities performed at the Mineral Springs site from October 2010 to October 2011 and since the remedial action was completed in 2001. Those activities include annual inspections, groundwater and surface water monitoring, and maintenance and repair of engineering controls. Data collected during performance of these activities and an evaluation of the effectiveness of the remedy are presented below.

The results of that evaluation show that the remedial action has been operated in accordance with the provisions of the O&M Plan and that engineering and institutional controls remain intact and effective.

The annual site inspection indicated there were several locations where maintenance issues needed to be addressed. These activities have been completed.

2. Site Overview

The Mineral Springs site lies in a flat, mixed industrial and residential area of West Seneca (and Buffalo), New York. The site is an active NFG service center. Figure 1 shows the facility layout.

The stratigraphy of the site consists of 4- to 8-feet of soil and fill, approximately 10-feet of a nearly continuous upper confining clay layer (UCL), 10- to 15-feet of groundwater bearing silt, sand, and gravel, a lower confining clay layer (LCL), and bedrock. Groundwater is typically encountered 5- to 12-feet below ground surface and seasonally fluctuates approximately 2 feet. Groundwater flow is generally to the northwest towards Mineral Springs Road, Calais Street, and the Buffalo River. Average groundwater velocity across the site is calculated to be approximately 0.06 feet per day.

The former MGP was built in the early 1920's and was operated until the 1960's. Coal and oil gasification wastes, particularly coal tar hydrocarbons and blue-stained purifier residuals, were generated during operation of the plant. In 1990 and 1995, investigations and soil remediations were performed near an oil-water separator pit in the central area of the site. In 1997 and 1998, a Preliminary Site Assessment (PSA) and a follow-up PSA Addendum were conducted. The assessments concluded that soil and groundwater at the site were impacted by MGP residues including dense non-aqueous phase liquids (DNAPL) and cyanide.

An interim remedial measure, conducted in December 1997, removed 407 tons of purifier residuals near a transmission tower in the southwest corner of the site. On August 4, 1998 National Fuel Gas submitted a Voluntary Cleanup Agreement (VCA) program application. VCA number B9-0538-98-08 was signed by NFG on June 2, 1999 and by NYSDEC on November 7, 1999. A Remedial Design Work Plan was developed by NFG and NYSDEC. From May 2000 to June 2001, the Work Plan was implemented and the following remedial tasks were completed:

- Excavation and offsite disposal of 32,200 tons of contaminated soil, rubble, and purifier waste.
- Construction of engineering controls including 130,890 square feet of asphalt cap, 76,144 square feet of geosynthetic cap, and 39,369 square feet of clay cap over areas where purifier waste was located.
- Capping of hydrocarbon seeps within the Eastern Drainage Ditch, including construction of 640 linear feet of geosynthetic cap and 750 linear feet of clay cap
- Installation of additional chain link security fence around the site perimeter.
- Implementation of site use and deed restrictions.
- Collection, treatment, and disposal of 207,000 gallons of contaminated groundwater.

During the annual site inspection in April 2007, NFG identified a faint blue stain in surface gravel near Building 8. In July 2007, a soil investigation in the area identified a subsurface lens of bluish stained soils. Based on the results of the investigation, a work plan was prepared describing an Interim Remedial Measure (IRM) to address the stained soil. The IRM Work Plan was submitted to NYSDEC in November 2008. The scope of the IRM included installation of a 24,000 square foot asphalt cap immediately to the east of the existing Building 3 East Asphalt Cap (B3EAC). Work to

install the new cap took place in June and July 2008. The new cap is designated as the Building 8 West Asphalt Cap (B8WAC), as shown on Figure 1.

In March 2011, NFG upgraded the fuel dispensing system at the Mineral Springs site. The location of the fuel island is shown as on Figure 1. This work was part of a normal facility upgrade and was not performed as a remedial action. Visual and odor indications of petroleum contamination were encountered below the fuel island during the excavation, which was reported to the Buffalo NYSDEC Spills Unit. Spill # 1012737 was assigned to the incident. As agreed to with the Spills unit, an NFG contractor dug four test pits and collected four soil samples to determine if the fuel had migrated beyond the immediate area of the fuel island. The samples were analyzed for volatile and semivolatile organic compounds. The results of the sampling showed that only one compound, acetone, had a concentration in soil above unrestricted use standards. The measured concentration of acetone in one sample was 0.054 mg/kg as compared to the unrestricted soil cleanup standard of 0.050 mg/kg. Acetone is a common laboratory contaminant. In addition, a sample of soil excavated during the installation was also collected and analyzed for disposal parameters. The spill was closed on May 18, 2011.

As part of the fuel island upgrade, a trench was excavated for installing a new electrical conduit between Building 3 and the fuel island. During excavation, a 6-inch lens of blue tinted rock-like or slag material was encountered underneath the pavement over a 15-foot length in the 18-inch deep trench. About 0.5 cubic yards of stained slag was separated from other excavated material. A sample of this material was collected and sent to the laboratory for cyanide analysis. The results of that analysis showed a cyanide concentration of 16 mg/kg, which is less than the unrestricted soil cleanup objective for cyanide. In addition, approximately 2,910 gallons of water was pumped into a vac truck during the excavation work. Both the water and soil were shipped to permitted off-site facilities for disposal.

3. Evaluation of Remedy Performance, Effectiveness, and Protectiveness

The objectives of the remedial action performed at the Mineral Springs site include the following:

- Preventing human contact with COC in purifier waste, soil, and sediment
- Preventing human contact or ingestion of COC in groundwater
- Preventing leaching of COC from purifier waste to groundwater
- Preventing leaching of COC from coal tar impacted soil to surface water

Preventing human contact with COC was addressed by excavating soil and purifier waste; capping areas where purifier waste was left in place; capping coal tar residues in the Eastern Drainage Ditch; and implementing institutional controls to limit site use, prevent use of groundwater, and provide protection for excavation workers. The effectiveness of the remedial action in meeting these objectives is evaluated by performing an annual inspection to verify that engineering controls remain intact and that site use has not changed. The results of this year's inspection, described in the next section, identified routine maintenance issues, but found that the caps remain in place and are intact and that the remedy is effective and protective.

Preventing leaching of COC to groundwater and surface water was addressed by excavating soil and purifier waste; capping areas where purifier waste was left in place; capping coal tar residues in

the Eastern Drainage Ditch; and removing DNAPL. The effectiveness of the remedial action in meeting these objectives is evaluated by performing an annual inspection and by implementing a groundwater and surface monitoring program. As described above, the site inspection found that engineering controls remain intact and effective.

In January 1998, NFG performed a soil gas survey to evaluate potential exposures to workers inside buildings at the Mineral Springs site. The report concluded that the results did not indicate a significant potential for exposure by site workers to excessive concentrations of airborne constituents resulting from soil gas migration into occupied building spaces.

In 2011, groundwater monitoring was performed at the site in April and September. The sampling programs were performed in accordance with the 2002 O&M Plan. An evaluation of the groundwater and surface water monitoring results from data collected during the April and September 2011 sampling events is presented in the following sections. Details of the results of this year's groundwater monitoring are presented in the April 2011 and September 2011 Groundwater and Surface Water Monitoring Reports. Figures 2 and 3 provide groundwater contours indicating the direction of groundwater flow at the site.

Upgradient Site Perimeter

Well MW-17 is located in the southeast corner of the site and monitors upgradient groundwater quality. Other than cyanide, MGP COCs are not typically present in detectable concentrations in the upgradient groundwater. A table showing historic and current groundwater monitoring results for MW-17 is presented in Appendix A. Benzene, toluene, ethylbenzene, and xylene (BTEX) compounds and polynuclear aromatic hydrocarbon (PAH) compounds have not historically been detected in MW-17. In the past two years, samples collected in August or September have shown significant concentrations of PAHs. Concentrations of five PAH compounds exceeded groundwater guidance values in both August 2010 and September 2011.

Downgradient Site Perimeter

Wells MW-20 and MW-21 are located downgradient of the western boundary of the site on Calais Street. Wells MW-13, MW-14, MW-22 and MW-23 are located just inside the northern property boundary near Mineral Springs Road. These six "sentinel" wells monitor groundwater quality downgradient of the site. The groundwater samples from these six wells are analyzed for total and free cyanide. Monitoring wells MW-13 and MW-23 are also analyzed for BTEX and PAHs during the August sampling event.

Tables in Appendix A show cyanide and hydrocarbon concentrations over time in these wells. Total cyanide concentrations in four of the wells, MW-13, MW-14, MW-20, and MW-22, appear to show no significant change over time. In two of the wells, MW-21 and MW-23, there does appear to be a consistent reduction in total cyanide concentrations in groundwater over the period between 1997 and 2011. BTEX and PAHs are not normally detected in MW-23. For MW-13, there appears to be a decrease in BTEX concentrations over time. BTEX and PAH compounds were not detected above groundwater standards in sentinel wells.

On-site Purifier Residuals Impacted Areas

Wells MW-12 and MW-16 monitor groundwater quality at the Eastern Swale HDPE Cap (ESHC) and the Clay Cap (CC), respectively. These are locations of known subsurface deposits of purifier

box residuals. These deposits were remediated by capping. Samples from these two wells were analyzed for total and free cyanide. As its chart shows, there does not seem to be any change in the concentration of total cyanide in MW-12. On the other hand, there does appear to have been a consistent increase in cyanide in MW-16 since 2001. The cause of this change is not known.

On-site Hydrocarbon Impacted Areas

Wells MW-07, MW-10, downgradient of the Separator Pits Excavation (SPE), MW-11A, adjacent to the drainage ditch cap and MW-19, downgradient of the Northern and Eastern Tar Boils Excavations monitor on-site groundwater quality. These are locations where subsurface soils impacted with hydrocarbon non-aqueous phase liquid (NAPL) are found. Samples from these wells were analyzed for BTEX and PAH compounds.

BTEX compounds are generally detected at low levels or not at all in MW-10. Concentrations of individual compounds rarely exceed groundwater standards. PAH compounds are typically also detected at low levels in this well, although several compounds were detected above groundwater standards in August 2010 and April 2011. BTEX and PAH compounds are consistently detected at concentrations well above groundwater standards in wells MW-07, MW-11A, and MW-19. A review of historic analytical data indicate that there has been no significant change in concentrations of organic compounds in MW-11A. The results for MW-07 appear to indicate that there have been decreases in both PAH and BTEX compounds since groundwater monitoring began. The results for MW-19 do not show any consistent change in concentrations of COC.

Surface Water

Surface water samples are collected near the Calais Street storm sewer inlet (SW-01) and at the Eastern Drainage Ditch near the Class D Stream (SW-02). Samples collected from location S-02 monitors surface water downgradient from the Eastern Drainage Ditch Cap while location S-01 monitors concentrations of COC in surface water downgradient of the Mineral Springs site. Total cyanide has never been detected at a concentration above the surface water standard, 9,000 ug/L, in either sampling location. Historically, BTEX and PAHs have not been consistently detected in surface water. Since 2009, concentrations of two PAHs, benzo(a)anthracene and benzo(a)pyrene, have been detected at location S-02 above water quality standards on three different occasions during the late summer monitoring event. However, these compounds have not been detected downstream in location S-01. BTEX compounds were detected in S-01 in September 2011 at concentrations more than a factor of 100 less than ambient water quality standards.

4. O&M Plan Compliance Report

The components of the O&M program for the Mineral Springs site are established in the 2002 O&M Plan. These include groundwater and surface water monitoring, DNAPL recovery, inspections, maintenance and repair of engineering controls, and reporting. Details of this program are described in the O&M Plan and summarized in Table 1. Table 2, taken from the O&M plan, summarizes the groundwater and surface water monitoring program.

O&M activities completed since the last report (dated October 2010) include the following:

- The annual site inspection was performed on April 26, 2011.

- Two groundwater and surface water monitoring rounds performed on April 21 and 22, and September 12 and 13, 2011.
- Continued operation of the DNAPL recovery system and removal of approximately 0.5 gallons of water containing DNAPL blebs in April 2011 and August 2011.
- Submittal of the Groundwater and Surface Water Monitoring Reports for the monitoring events performed in April and September 2011.
- Performance of maintenance activities to address issues identified during the annual inspection.
- Re-inspection of the site on August 23, 2011.

During the annual inspection in April, observations of site conditions were recorded. The inspection checklist is included as Appendix B. Photographs taken during the inspection are included in Appendix C. An Institutional and Engineering Controls Certification Form is attached in Appendix D.

Site Inspection

Clay Caps

Clay caps, designated CC on Figure 1, are located southeast of Building 14 and in the Eastern Drainage Ditch north of the northern culvert and south of the southern culvert, designated EDD.

The clay cap southeast of Building 14 has been mowed periodically to prevent tree growth. No blue stained soils were observed during the inspection. Several large holes were observed along the fence line south of the cap, near the culvert in a different location than the hole identified and repaired last year. Following the April inspection NFG filled the holes with gravel. Sink holes observed this year and in the past near the fence line result from infiltration of soil into the storm water culvert located south of the site. The culvert is not located on NFG property. A review of the as-built drawing from cap construction shows that the cap in that location includes a clay cutoff wall constructed as part of the clay cap. The drawing shows that the holes observed have not impacted the cutoff wall and have not reduced the effectiveness of the cap.

In the clay-capped sections of the Eastern Drainage Ditch, no erosion, animal burrows, or hydrocarbon sheen were observed.

Geomembrane Caps

Geomembrane caps, constructed of 40-mil high density polyethylene (HDPE) and soil or stone cover, are located in the Eastern Swale and in the Eastern Drainage Ditch between the culverts. These caps are designated Eastern Swale HDPE Cap (ESHC) and EDD respectively.

The ESHC has been mowed periodically. No plastic or geofabric, animal burrows, or blue-stained surface soil were visible. Debris, plywood, and piles of soil were observed on both the northern and southern sides of the cap. These had been removed by the time of the re-inspection. Corrugated HDPE pipe placed in a gravel filled ditch which drains the cap to the EDD was visible on the surface of the gravel. The pipe had been reinstalled by the time of the re-inspection. Chain fence at the west side of cap had been knocked down. It was fixed by the time of the re-inspection.

The EDD cap includes an 18-inch diameter HDPE surface water drain pipe. There was no erosion, animal burrows, deep-rooted perennial plant species, or hydrocarbon sheen observed. The “no dig” signage was in place. Water levels in the EDD were very high because of recent heavy rains.

Asphalt Caps

Asphalt caps are located south and east of Building 3, designated B3SAC and B3EAC respectively; north and south of the Eastern Swale, designated ESNAC and ESSAC; and west of Building 8, designated B8WAC. All caps were observed to be intact with no significant cracking. Crack repairs performed in previous years remain intact.

Other Areas

Throughout the remainder of the site, no tar boils or blue-stained soils were observed. No hydrocarbon sheens were observed in the Class D Stream or the Eastern Drainage Ditch. The compacted backfill placed in the various former Tar Boils and Separator Pit excavations has been maintained as necessary to assure run-off control. These areas showed no ponding of surface water. The site perimeter security fence was observed to be intact.

Groundwater and Surface Water Monitoring

Groundwater and surface water monitoring results for the April 2011 and September 2011 monitoring events are presented in the groundwater and surface water monitoring reports, prepared by AECOM and submitted to NYSDEC in August and October 2011. A summary of groundwater and surface water analytical results for the period between August 1995 and September 2011 is tabulated in Appendix A. Sampling locations are shown on Figure 1. A discussion of the results of monitoring in specific areas of the site were presented in the previous section.

Conclusions

Since the last O&M report, O&M activities described in the O&M Plan have been performed as specified and no deficiencies have been identified. All engineering and institutional controls are intact and remain effective. NFG has been prompt in making repairs and performing maintenance when significant issues have been identified.

As discussed above, the results of groundwater monitoring indicate that there have been changes in groundwater concentrations of organic constituents and cyanide in some wells. Concentrations of cyanide in groundwater in the sentinel wells at the downgradient property boundary remain at concentrations somewhat higher than NYSDEC standards although significant reductions in concentrations were noted in two wells.

5. Overall PRR Conclusions and Recommendations

As discussed above, the O&M program is being implemented in accordance with the provisions of the O&M Plan. The results of the site inspection indicate that engineering and institutional controls remain intact and continue to be effective in meeting remedial objectives.

The results of groundwater and surface water monitoring show that groundwater concentrations have changed since remediation at the site was completed. At the downgradient property boundary, concentrations in two of the five wells have shown a decrease in the concentrations of cyanide. One

has shown a decrease in the concentration of BTEX. It is the conclusion of this report that the remedial action remains protective and shows potential signs of progress.

Several maintenance issues related to the caps installed during the remedial action were identified during the April 2011 site inspection. Those issues have been addressed. Please do not hesitate to call me with questions at 978-589-3707.

Sincerely yours,

A handwritten signature in blue ink, appearing to be 'Tom Clark', with a large loop at the start and a wavy line at the end.

Thomas P. Clark, P.E.
Senior Engineer

cc: C. Burke – NFG
T. Alexander – NFG
S. Messier – NYSDOH
R. Kennedy – Hogdson Russ LLP
T. Raby, AECOM

Tables

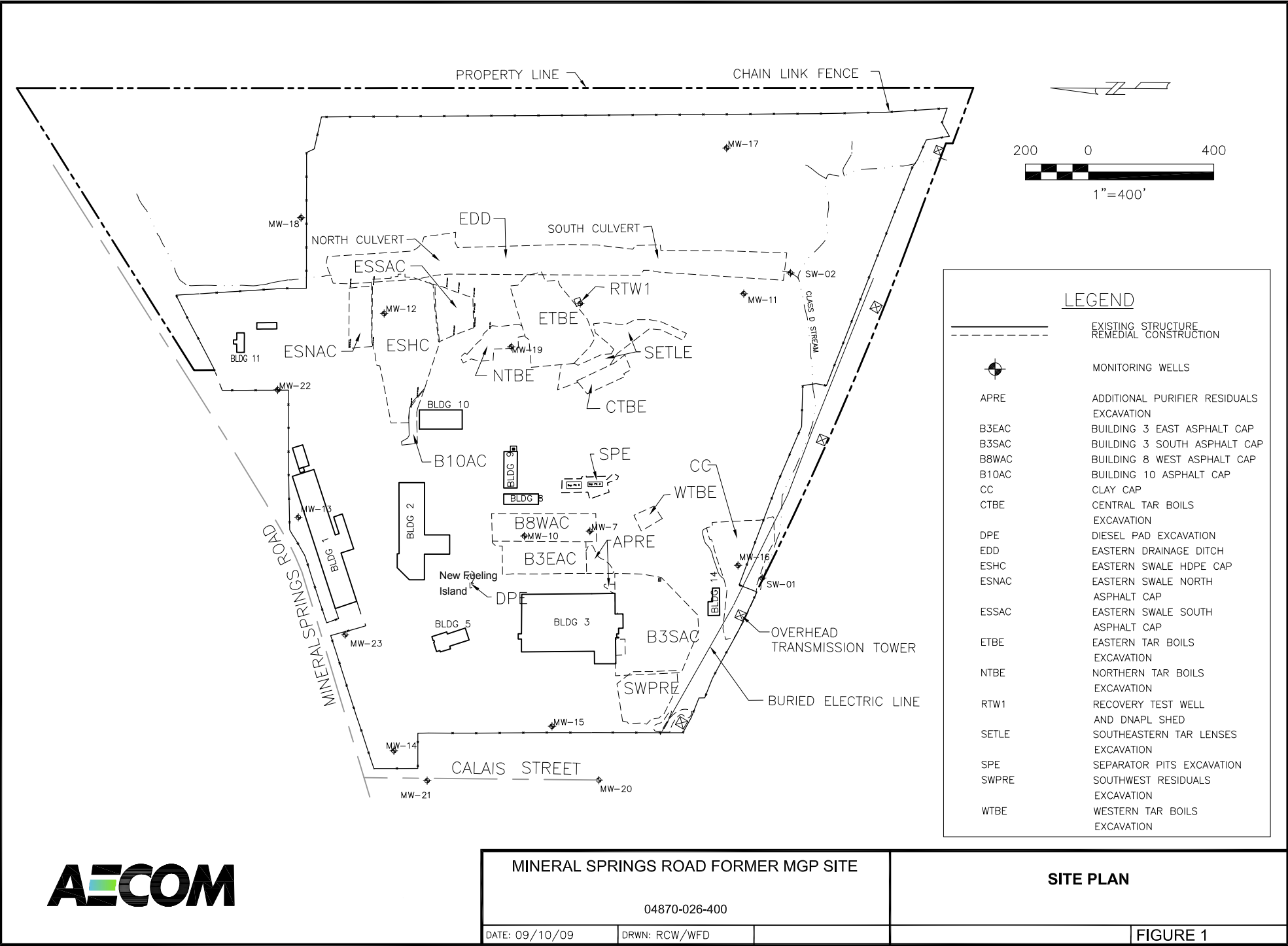
Table 1
Operations, Maintenance, and Monitoring Scope of Work
Mineral Springs Former MGP Site

	Frequency	Description	Notes
Groundwater and Surface Water Monitoring	Twice a year	Groundwater and surface water monitoring as specified in Table 2. Monitoring takes place in April or May and July or August.	Scope in 2002 included monitoring three times a year. The frequency was modified in 2003 with NYSDEC approval.
DNAPL Recovery Test Well	Twice a year	DNAPL recovery from well RTW-1.	Continuous operations of RTW-1 was halted in 2002 with NYSDEC approval since only de minimus amount of DNAPL was being recovered
Site Inspections	Annual	Inspection of the following: Clay, geomembrane, and asphalt caps Ground surface for signs of tar or purifier residues Fencing Stream	
Maintenance and Repair	As needed	Activities determined based on inspection results	
Reporting	Twice a year	Groundwater Monitoring Report	
	Annually	O&M Report	Periodic Review Report (PRR) now submitted annually to meet new NYSDEC requirements

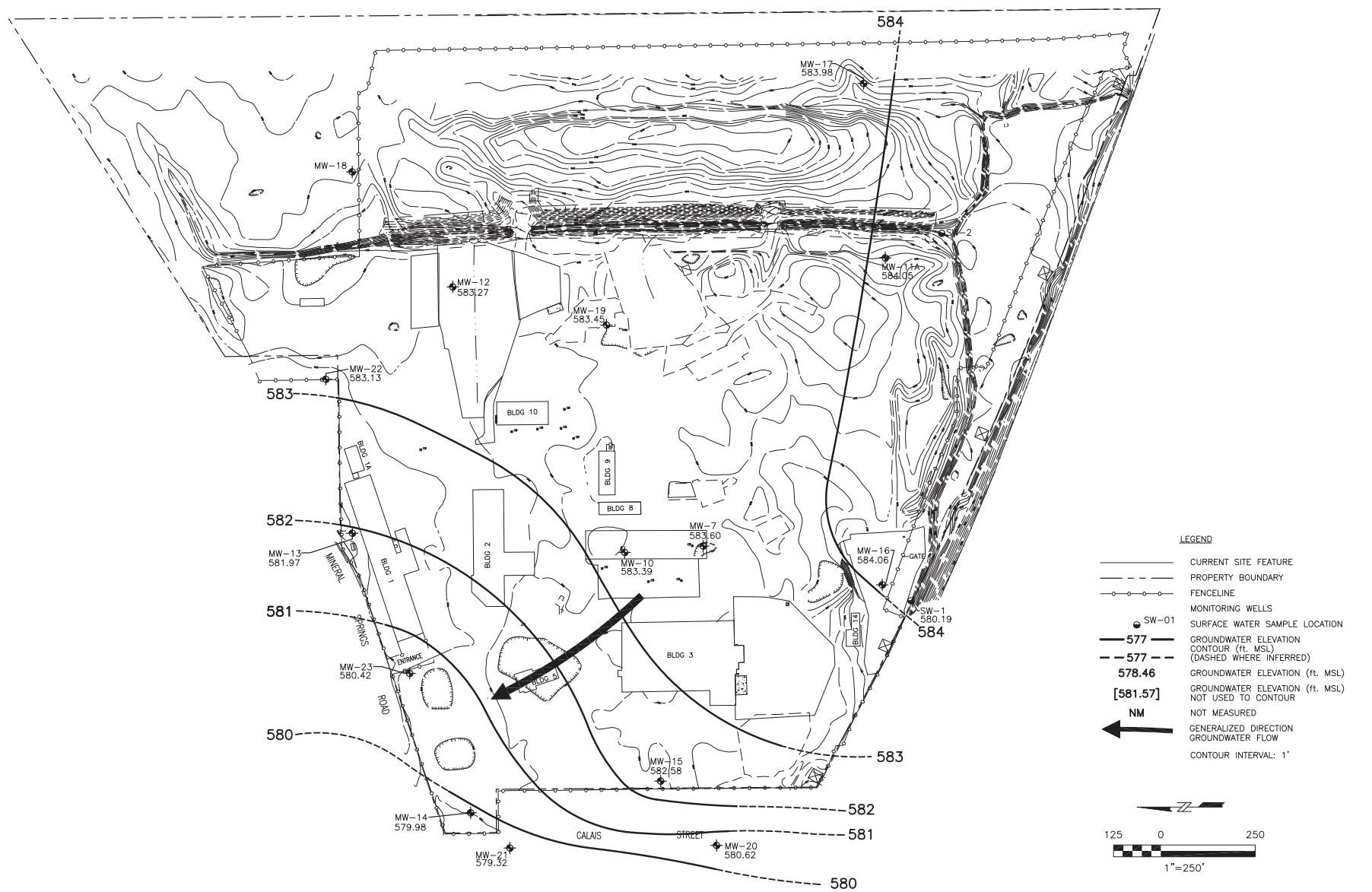
Table 2
Water Sampling Summary Table
Mineral Springs, 2001

Location	Cyanide, Total USEPA SW846 9012A	Cyanide, Free ASTM D4282-89	BTEX USEPA SW846 8260B	PAHs USEPA SW846 8270C	Water Elevation	Benchmark Elevation (top of PVC casing)
Upgradient Site Perimeter						
MW-17	x	x	x	X	x	587.28
Downgradient Site Perimeter						
MW-13	x	x	annually	annually	x	591.85
MW-14	x	x			x	589.81
MW-15					x	590.93
MW-20	x	x			x	587.30
MW-21	x	x			x	587.88
MW-22	x	x			x	592.50
MW-23	x	x	annually	annually	x	589.28
Onsite Purifier Residuals Impacted Areas						
MW-12	x	x			x	591.40
MW-16	x	x			x	588.99
Onsite Hydrocarbon Impacted Areas						
MW-07			x	X	x	587.26
MW-10			x	X	x	587.61
MW-11			x	X	x	590.03
MW-19			x	X	x	589.83
Onsite Surface Water						
SW-01	x	x	x	X	x	top of headwall = 587.0
SW-02	x	x	x	X		
QA/QC Samples (frequency)						
Trip Blank			x			(one per shipment)
Field Duplicate	x	x	x	X		(one per event)
Equipment Blank	x	x	x	X		(one per event)
DNAPL Recovery						
RTW-1						(purge well of accumulated DNAPL)
Total	13	13	10 or 12	9 or 11	15	
Container, Preservative	500 ml plastic, NaOH	1 L plastic amber, NaOH	40 mL VOA vial, HCl (x2)	1 L glass amber, NP (x2)		

Figures



AECOM



NATIONAL FUEL GAS
MINERAL SPRINGS ROAD MGP SITE
60137322-300

GROUNDWATER CONTOURS
APRIL 2011

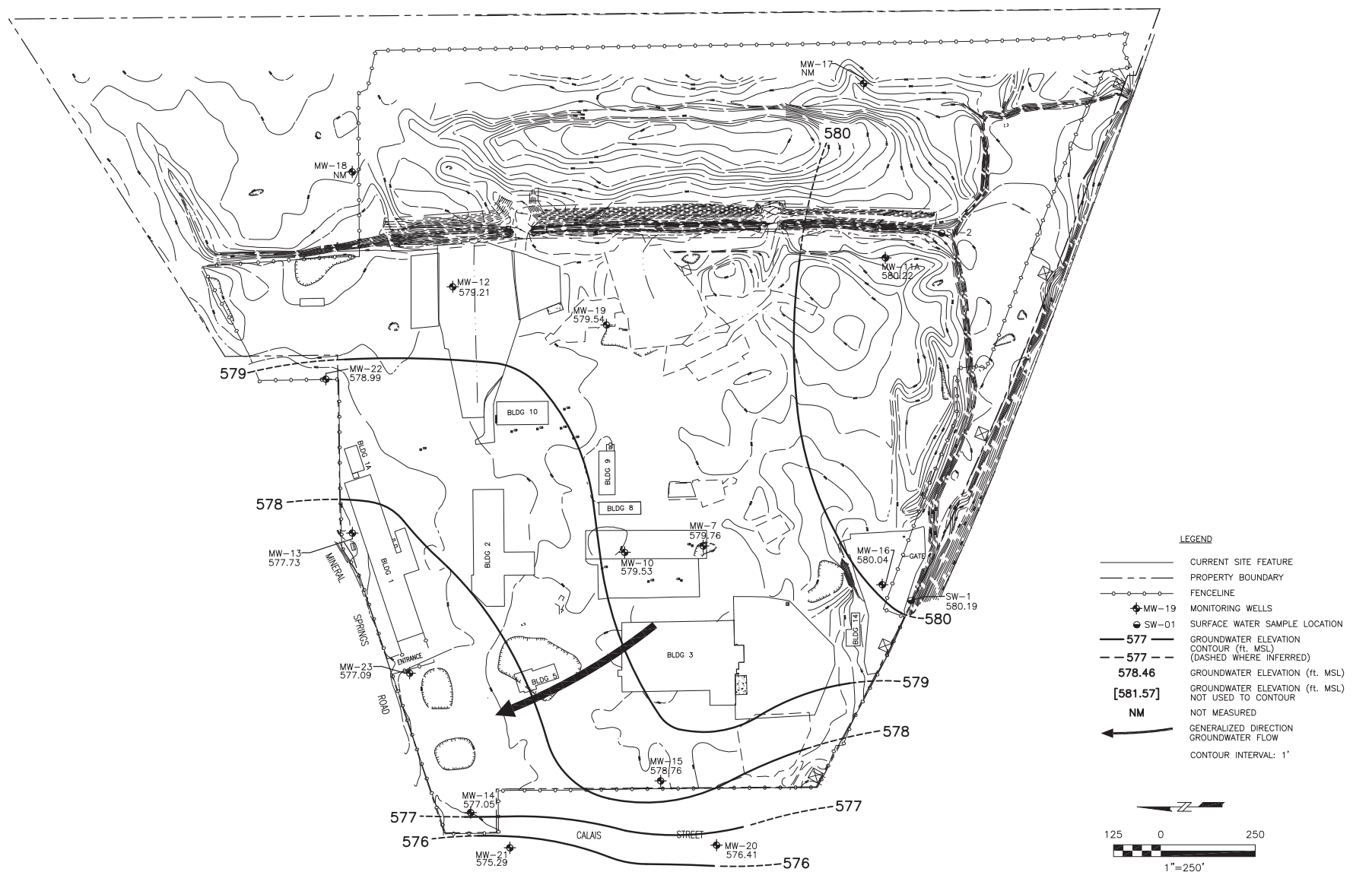
DATE: 9/2011

DRWN: BcV/W-MA

FIGURE 2

File: J:\Caddies\CA00\60137322\GW-2011.dwg User: versionb Plotted: Oct 17, 2011 - 8:40am Xref's:

AECOM



NATIONAL FUEL GAS
MINERAL SPRINGS ROAD MGP SITE
60137322-300

DATE: 10/2011

DRWN: BcV/C-MA

GROUNDWATER CONTOURS
SEPTEMBER 2011

FIGURE 3

Appendix A

Groundwater and Surface Water Monitoring Results

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

[illegible]

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10	MW-10
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11
Benzene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	1.2	nd	nd	nd	nd	nd	0.83	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Toluene	nd	nd	nd		nd	nd	nd	nd	nd	0.89	nd	nd	0.81	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	0.9	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Xylene (sum of isomers)	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.66	nd	nd	nd	nd	nd	nd	nd
Total BTEX	0	0	0		0	0	0	0	0	0.89	0	0	2.91	0	0	0	0	0	0.83	0	0	0	0	1.96	0	0	0	0	0	0	0	0
Napthalene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	2.1	nd	nd	nd	nd	nd	nd	0.78	nd	43	nd	nd	2.3	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthylene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Acenaphthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluorene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Phenanthrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.69	nd
Anthracene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Fluoranthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.77	nd
Pyrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.53	nd
Benzo(a)Anthracene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.27	nd	nd
Chrysene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.41	nd	nd
Benzo(b)Fluoranthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.18	nd
Benzo(k)Fluoranthene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(a)Pyrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Indeno(1,2,3-cd)Pyrene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.35	nd	nd
Dibenzo(a,h)Anthracene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzo(g,h,i)Perylene	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	0.28	nd	nd
2-Methylnaphthalene								nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	3.8	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Total PAHs	0	0	0		0	0	0	0	0	0	0	2.1	0	0	0	0	0	0	0.78	0	46.8	0	0	2.3	0	0	0	0	0	1.31	2.17	0
Cyanide, total (Exygen/ Test America)			334																													
Cyanide, total (Clarkson Univ.)																																
Cyanide, free (Exygen/ Test America)																																
Cyanide, free (Clarkson Univ.)																																
Water Elevation (feet)			579.87	581.44	579.33	581.19	581.07	579.64	580.10	581.61	580.51	579.51	581.23	579.93	579.16	581.92	580.80	580.90	581.78	579.53	581.15	580.04	582.06	578.19	581.51	580.45	581.10	580.82	580.49	580.56	583.39	579.53

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

MW-11 / MW-11A	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A	MW-11A
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11
Benzene			35		nd	nd	nd	nd		nd	nd	nd	nd	350	80	50	270	150	140	250	67	140	100	180	230	210	190	200	77	150	15	170
Toluene			17		nd	nd	nd	68		nd	3.8	nd	nd	230	1.2	0.7	35	nd	1.2	7	0.56	1.2	0.99	nd	5.5	nd	nd	nd	0.78	1.9	nd	nd
Ethylbenzene			94		nd	nd	nd	nd		nd	nd	nd	nd	650	3.5	6.9	30	5.4	9.6	38	2.5	8.7	2.8	5.5	69	71	67	80	35	56	5.7	63
Xylene (sum of isomers)			83		7	nd	nd	nd		nd	nd	nd	nd	410	9.1	9.2	38	16	16	30	8.1	14	5.5	29	41	30	24	28	21	27	3.5	25
Total BTEX			229		7	0	0	68		0	4	0	0	1640	94	67	373	171	167	325	78	164	109	215	346	311	281	308	133.78	234.9	24.2	258
Naphthalene			140		12	nd	nd	nd		nd	nd	nd	nd	150	130	nd	39	31	nd	20	2.9	nd	nd	0.79	7.1	2.5	4.1	9.3	0.78	2.6	0.28	4
Acenaphthylene			9		2	nd	nd	nd		nd	nd	nd	nd	12	8.4	nd	7.9	9.4	2.8	8.9	5.1	nd	5.8	0.93	6.9	3.4	3.7	4.6	2.4	3.8	0.72	2.8
Acenaphthene			7		nd	nd	nd	nd		nd	nd	nd	nd	4.4	3.1	1.2	4.5	5.9	4.5	5.6	nd	nd	nd	2.7	5.6	5	4.1	6.1	3.1	5.1	2.6	4.6
Fluorene			nd		nd	nd	nd	nd		nd	nd	nd	nd	2.2	nd	nd	1.9	2.3	1.3	1.7	1.5	nd	nd	nd	5.1	0.86	0.89	1.6	0.72	1.2	0.83	nd
Phenanthrene			nd		nd	nd	nd	nd		nd	nd	nd	nd	2.7	2.2	nd	3.7	6.4	nd	2	nd	nd	nd	nd	1.5	nd	nd	2.8	nd	0.56	nd	nd
Anthracene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	0.5	1.6	nd	nd	nd	nd	nd	nd	2.2	nd	nd	nd	nd	0.3	0.24	nd
Fluoranthene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	0.3	nd	nd	nd	nd	0.57	nd	nd	0.32	0.52	0.24	0.51	0.45	0.42
Pyrene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	0.3	0.73	0.46	0.33	nd	nd	nd	1.2	nd	nd	0.36	0.75	0.27	0.52	0.71	0.56
Benzo(a)Anthracene			nd		nd	nd	nd	nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Chrysene			nd		nd	nd	nd	nd		nd	nd	nd																				

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

MW-12		MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12	MW-12		
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	MW-12	
Benzene			17																														
Toluene			nd																														
Ethylbenzene			nd																														
Xylene (sum of isomers)			nd																														
Total BTEX			17																														
Naphthalene			nd																														
Acenaphthylene			nd																														
Acenaphthene			nd																														
Fluorene			nd																														
Phenanthrene			nd																														
Anthracene			nd																														
Fluoranthene			nd																														
Pyrene			nd																														
Benzo(a)Anthracene			nd																														
Chrysene			nd																														
Benzo(b)Fluoranthene			nd																														
Benzo(k)Fluoranthene			nd																														
Benzo(a)Pyrene			nd																														
Indeno(1,2,3-cd)Pyrene			nd																														
Dibenzo(a,h)Anthracene			nd																														
Benzo(g,h,i)Perylene			nd																														
2-Methylnaphthalene																																	
Total PAHs			0																														
Cyanide, total (Exygen/ Test America)			375		294	380	434	1840	393	522	2020	438	440	384	437	134	458	514	2110												708	837	720
Cyanide, total (Clarkson Univ.)						nd	nd	nd	nd	nd	58	7	nd	88	57	19	461	491	425	413	440	415	459	454	473	550	472	449	550				
Cyanide, free (Exygen/ Test America)						nd	nd	nd	nd	nd	58	7	nd	88	57	19	6	5	817											6.0	7.0	nd	
Cyanide, free (Clarkson Univ.)																6.7	nd	nd	3.3	2.9	2.6	nd	nd	6.8	25	7.2	4.1	4.7	nd				
Water Elevation (feet)			579.45	581.07	578.98	580.90	580.72	579.30	579.54	581.40	580.30	579.29	580.82	579.59	579.75	581.55	580.39	580.51	581.48	579.27	580.96	579.78	581.88	578.7	581.25	580.16	581.10	580.35	581.45	579.50	583.27	579.21	

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

[illegible]

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

[illegible]

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	MW-15	
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11
Benzene			nd																													
Toluene			nd																													
Ethylbenzene			nd																													
Xylene (sum of isomers)			nd																													
Total BTEX			0																													
Naphthalene			nd																													
Acenaphthylene			nd																													
Acenaphthene			nd																													
Fluorene			nd																													
Phenanthrene			nd																													
Anthracene			nd																													
Fluoranthene			nd																													
Pyrene			nd																													
Benzo(a)Anthracene			nd																													
Chrysene			nd																													
Benzo(b)Fluoranthene			nd																													
Benzo(k)Fluoranthene			nd																													
Benzo(a)Pyrene			nd																													
Indeno(1,2,3-cd)Pyrene			nd																													
Dibenzo(a,h)Anthracene			nd																													
Benzo(g,h,i)Perylene			nd																													
2-Methylnaphthalene																																
Total PAHs			0																													
Cyanide, total (Exygen/ Test America)			78.8																													
Cyanide, total (Clarkson Univ.)																																
Cyanide, free (Exygen/ Test America)																																
Cyanide, free (Clarkson Univ.)																																
Water Elevation (feet)			579.11	579.81	578.70	580.15	580.55	578.98	579.49	580.98	579.48	578.88	580.40	579.11	579.30	581.04	579.99	---	580.54	579.45	580.54	579.36	---	577.89	580.60	579.65	580.61	579.65	580.87	579.18	582.58	578.76

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

[illegible]

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

[illegible]

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

[illegible]

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

[illegible]

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

MW-20		MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20	MW-20		
DATE		Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11
Benzene						nd																											
Toluene						nd																											
Ethylbenzene						nd																											
Xylene (sum of isomers)						nd																											
Total BTEX						0																											
Naphthalene						nd																											
Acenaphthylene						nd																											
Acenaphthene						nd																											
Fluorene						nd																											
Phenanthrene						nd																											
Anthracene						nd																											
Fluoranthene						nd																											
Pyrene						nd																											
Benzo(a)Anthracene						nd																											
Chrysene						nd																											
Benzo(b)Fluoranthene						nd																											
Benzo(k)Fluoranthene						nd																											
Benzo(a)Pyrene						nd																											
Indeno(1,2,3-cd)Pyrene						nd																											
Dibenzo(a,h)Anthracene						nd																											
Benzo(g,h,i)Perylene						nd																											
2-Methylnaphthalene																																	
Total PAHs						0																											
Cyanide, total (Exygen/ Test America)						344	450	295	439	46	455	361	8	506	399	21	501	242	387	644											139	690	560
Cyanide, total (Clarkson Univ.)																		242	444	402	160	429	172	469	337	494	115	418	268	495			
Cyanide, free (Exygen/ Test America)							nd	13	nd	nd	nd	10	9	nd	44	14	nd	nd	53	13										nd	6	nd	
Cyanide, free (Clarkson Univ.)																	nd	nd	nd	nd	nd	nd	nd	nd	2.6	3.2	nd	nd	nd	nd			
Water Elevation (feet)						576.67	579.24	578.86	576.76	577.15	579.20	577.49	576.60	578.34	576.90	577.16	578.96	577.42	577.82	578.82	576.60	578.20	577.07	579.03	575.78	578.43	577.4	578.78	577.87	578.9	577.11	580.62	576.41

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

[illegible]

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11
Benzene					6																											
Toluene					nd																											
Ethylbenzene					nd																											
Xylene (sum of isomers)					nd																											
Total BTEX					6																											
Naphthalene					nd																											
Acenaphthylene					nd																											
Acenaphthene					nd																											
Fluorene					nd																											
Phenanthrene					nd																											
Anthracene					nd																											
Fluoranthene					nd																											
Pyrene					nd																											
Benzo(a)Anthracene					nd																											
Chrysene					nd																											
Benzo(b)Fluoranthene					nd																											
Benzo(k)Fluoranthene					nd																											
Benzo(a)Pyrene					nd																											
Indeno(1,2,3-cd)Pyrene					nd																											
Dibenzo(a,h)Anthracene					nd																											
Benzo(g,h,i)Perylene					nd																											
2-Methylnaphthalene																																
Total PAHs					0																											
Cyanide, total (Exygen/ Test America)					487	600	1010	734	460	703	1570	467	604	560	1080	741	504	803	941											778	1030	860
Cyanide, total (Clarkson Univ.)						nd	nd	201	nd	nd	49	231	267	88	49	132	nd	207	99	534	587	540	642	641	666	785	704	690	771			
Cyanide, free (Exygen/ Test America)						nd	nd	201	nd	nd	49	231	267	88	49	132	nd	207	99										nd	7	nd	
Cyanide, free (Clarkson Univ.)																nd	8	nd	3.1	2.4	nd	nd	nd	4.3	5.9	3.3	3.1	3.4	nd			
Water Elevation (feet)					578.80	580.70	580.51	579.09	579.50	581.25	580.05	579.10	580.62	579.42	579.47	581.27	580.05	580.22	581.28	579.13	580.69	579.60	581.75	578.02	581.03	579.93	580.86	580.03	581.19	579.29	583.13	578.99

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	MW-23	
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11
Benzene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Toluene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Ethylbenzene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Xylene (sum of isomers)						nd						nd			nd			nd				nd				nd		nd		nd		nd
Total BTEX						0						0			0			0				0				0		0		0		0
Naphthalene						nd						nd			nd			nd				3.6				nd		nd		nd		nd
Acenaphthylene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Acenaphthene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Fluorene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Phenanthrene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Anthracene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Fluoranthene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Pyrene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Benzo(a)Anthracene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Chrysene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Benzo(b)Fluoranthene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Benzo(k)Fluoranthene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Benzo(a)Pyrene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Indeno(1,2,3-cd)Pyrene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Dibenzo(a,h)Anthracene						nd						nd			nd			nd				nd				nd		nd		nd		nd
Benzo(g,h,i)Perylene						nd						nd			nd			nd				nd				nd		nd		nd		nd
2-Methylnaphthalene												nd			nd			nd				nd				nd		nd		nd		nd
Total PAHs						0						0			0			0				3.6				0		0		0		0
Cyanide, total (Exygen/ Test America)						480	658	469	654	480	425	728	356	620	729	587	446	437	274											299	307	360
Cyanide, total (Clarkson Univ.)																	493	560	359	325	267	321	326	374	252	344	276	320	277			
Cyanide, free (Exygen/ Test America)						nd	nd	nd	nd	nd	12	10	nd	15	6	5	9	5	57											nd	6	4
Cyanide, free (Clarkson Univ.)																nd	nd	nd	nd	nd	nd	nd	nd	3.2	11.7	nd	nd	nd				
Water Elevation (feet)						578.66	578.30	577.40	577.58	578.69	577.83	577.18	578.11	577.40	577.29	578.54	577.83	577.91	578.61	577.44	578.19	577.63	578.95	577.19	578.37	577.83	578.16	577.95	578.44	577.53	580.42	577.09

Mineral Springs
Historical Analytical Data Summary
All Units in ug/L

[illegible]

**Mineral Springs
Historical Analytical Data Summary
All Units in ug/L**

SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	SW-02	
DATE	Aug-95	May-96	Jul-97	Feb-98	Jun-99	Apr-00	Apr-01	Jul-01	Nov-01	Apr-02	Jun-02	Nov-02	Apr-03	Jul-03	Nov-03	Mar-04	Jun-04	Nov-04	Apr-05	Jul-05	Apr-06	Aug-06	Apr-07	Aug-07	Apr-08	Sep-08	Apr-09	Aug-09	Apr-10	Aug-10	Apr-11	Sep-11		
Benzene			nd		nd	6	2	nd	nd	1.2	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd		Dry	nd	nd	nd	nd	nd	nd	nd	nd	nd	
Toluene			nd		nd	8	2	nd	nd	0.25	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	0.23	0.18	7.2	nd	nd	nd	
Ethylbenzene			nd		nd	15	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	nd	nd	nd	nd	
Xylene (sum of isomers)			nd		nd	24	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	nd	nd	nd	nd	
Total BTEX			0		0	53	4	0	0	1.45	0	0	0	0	0	0	0	0	0	0	0	0			0	0	0	0.23	0.18	7.2	0	0	0	
Napthalene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			0.94	nd	nd	nd	nd	nd	nd	nd	nd	
Acenaphthylene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	nd	nd	nd	nd	
Acenaphthene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	nd	nd	nd	nd	
Fluorene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	nd	nd	nd	nd	
Phenanthrene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	0.72	nd	nd	nd	nd	nd	
Anthracene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	0.19	nd	nd	nd	
Fluoranthene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	1.2	nd	0.63	nd	1.2	nd	
Pyrene			nd		nd	nd	nd	0.77	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	1.1	nd	0.55	nd	0.92	nd	
Benzo(a)Anthracene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	0.49	nd	1.5	nd	nd	nd	
Chrysene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	0.85	nd	1.2	nd	nd	nd	
Benzo(b)Fluoranthene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	1.2	nd	1.3	nd	1.7	nd	
Benzo(k)Fluoranthene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	1.2	nd	nd	nd	
Benzo(a)Pyrene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	0.63	nd	1.1	nd	nd	nd	
Indeno(1,2,3-cd)Pyrene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	1.3	nd	nd	nd	
Dibenzo(a,h)Anthracene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	1.3	nd	nd	nd	
Benzo(g,h,i)Perylene			nd		nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	0.55	nd	1.5	nd	nd	nd	
2-Methylnaphthalene							nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd			nd	nd	nd	nd	nd	nd	nd	nd	nd	
Total PAHs			0		0	0	0	0.77	0	0	0	0	0	0	0	0	0	0	0	0	0	0			0.94	0	0	6.74	0	11.77	0	3.82	nd	nd
Cyanide, total (Exygen/ Test America)			77.5		nd	380	121	nd	7	130	nd	1440	17	30	62	48	nd	24	nd												369	nd	93	
Cyanide, total (Clarkson Univ.)																	nd	50	nd	nd	3	nd	nd		86	86	16	141	4.4					
Cyanide, free (Exygen/ Test America)						111	nd	nd	nd	16	nd	42	nd	nd	nd	20	nd	12	nd											nd	6	11		
Cyanide, free (Clarkson Univ.)																19.2	nd	6.2	nd	nd	2.3	nd	8.6		50.7	10.1	nd	3.0	nd					
Water Elevation (feet, approximate)					580.3	580.9	580.6	580.5	580.6	581.5	580.1	580.3	581.1	581.8	582.4	582.7	581.0	581.7	581.7	580.3	582.0	580.6	583.2		---	---	---	---	---	---	---	---	---	

Appendix B

Annual Site Inspection Form

Annual Site Inspection Form
Mineral Springs Road Former MGP

Inspection by: Thomas P. Clark, P.E.

Signature: 

Affiliation: AECOM Environment, Inc.

Date: April 26, 2011 (Inspection date)

<p>ASPHALT CAP SOUTH OF BUILDING #3 (B3SAC)</p> <p>Cracks or ruts ? Yes <input type="radio"/> No</p> <p>Erosion at edges ? Yes <input type="radio"/> No</p> <p>Blue-stained soil ? Yes <input type="radio"/> No</p> <p>Comments:</p> <p>Cap in good condition. Previously sealed cracks intact. No significant ponding except in one small area by catch basin.</p>	<p>CLAY CAP BEHIND BUILDING #14 (CC)</p> <p>Animal dens ? Yes <input type="radio"/> No</p> <p>Erosion ? Yes <input type="radio"/> No</p> <p>Trees ? Yes <input type="radio"/> No</p> <p>Blue-stained soil ? Yes <input type="radio"/> No</p> <p>Comments:</p> <p>New off-site sinkholes next to the cap along the south side of the fence. No damage to the cap observed. See photos.</p>
<p>ASPHALT CAP EAST OF BUILDING #3 (B3EAC)</p> <p>Cracks or ruts ? Yes <input type="radio"/> No</p> <p>Erosion at edges ? Yes <input type="radio"/> No</p> <p>Blue-stained soil ? Yes <input type="radio"/> No</p> <p>Comments:</p> <p>Cap in good condition. Previously sealed cracks intact. A few minor new cracks.</p>	<p>EASTERN DRAINAGE DITCH (EDD)</p> <p>Animal dens ? Yes <input type="radio"/> No</p> <p>Erosion ? Yes <input type="radio"/> No</p> <p>Trees ? Yes <input type="radio"/> No</p> <p>Blue-stained soil ? Yes <input type="radio"/> No</p> <p>Hydrocarbon sheen ? Yes <input type="radio"/> No</p> <p>Inadequate Signage ? Yes <input type="radio"/> No</p> <p>Trash / Debris ? Yes <input type="radio"/> No</p> <p>Comments:</p> <p>Ditch in good condition. High water levels caused by heavy rains.</p>
<p>ASPHALT CAP NORTH OF EASTERN SWALE (ESNAC)</p> <p>Cracks or ruts ? Yes <input type="radio"/> No</p> <p>Erosion at edges ? Yes <input type="radio"/> No</p> <p>Blue-stained soil ? Yes <input type="radio"/> No</p> <p>Comments:</p> <p>Cap in good condition. Crack sealing in good condition. Debris and soil between cap and EDD.</p>	<p>BACKFILLED EXCAVATIONS (NTBE, CTBE, ETBE, SETLE)</p> <p>Excessive settlement ? Yes <input type="radio"/> No</p> <p>Ponding of surface water ? Yes <input type="radio"/> No</p> <p>Tar boils ? Yes <input type="radio"/> No</p> <p>Blue-stained soil ? Yes <input type="radio"/> No</p> <p>Comments:</p>
<p>ASPHALT CAP SOUTH OF EASTERN SWALE (ESSAC)</p> <p>Cracks or ruts ? Yes <input type="radio"/> No</p> <p>Erosion at edges ? Yes <input type="radio"/> No</p> <p>Blue-stained soil ? Yes <input type="radio"/> No</p> <p>Comments:</p> <p>Cap in good condition. No significant cracking.</p>	<p>CLASS D STREAM</p> <p>Hydrocarbon sheen ? Yes <input type="radio"/> No</p> <p>Comments:</p> <p>Because of high water levels, some portions of stream not inspected. Floating debris observed near culvert intake next to CC.</p>
<p>HDPE/SOIL CAP IN EASTERN SWALE (ESHC)</p> <p>Cracks or ruts ? Yes <input type="radio"/> No</p> <p>Erosion at edges ? Yes <input type="radio"/> No</p> <p>Blue-stained soil ? Yes <input type="radio"/> No</p> <p>Comments:</p> <p>Cap in good condition. No ponding after heavy rain. Some debris and soil on north and south side of cap. Plastic pipe visible in gravel drainage ditch. Chain fence knocked over.</p>	<p>SITE FENCE</p> <p>Damage / Holes ? Yes <input type="radio"/> No</p> <p>Comments:</p> <p>No damage observed. Parts of fence could not be inspected because of flooding.</p>

Appendix C

Photographs

PHOTOGRAPHIC LOG


Client Name: National Fuel Gas Distribution Corp.		Site Location: 365 Mineral Springs Road, Buffalo, New York	Project No. 60137322
Photo No. <div style="text-align: center; font-size: 1.2em; font-weight: bold;">1</div>	Date: 4/26/11		
Direction Photo Taken: From the West			
Description: Eastern Swale HDPE Cap – Drainage pipe observed in gravel-filled ditch.			

Photo No. <div style="text-align: center; font-size: 1.2em; font-weight: bold;">2</div>	Date: 4/26/11		
Direction Photo Taken: From the South			
Description: Eastern Drainage Ditch – High water levels			

PHOTOGRAPHIC LOG


Client Name: National Fuel Gas Distribution Corp.		Site Location: 365 Mineral Springs Road, Buffalo, New York		Project No. 60137322	
Photo No. <div style="text-align: center; font-size: 1.2em; font-weight: bold;">3</div>	Date: 4/26/11				
Direction Photo Taken: From the East					
Description: Eastern Swale HDPE Cap – Debris and soil on edge of cap.					

Photo No. <div style="text-align: center; font-size: 1.2em; font-weight: bold;">4</div>	Date: 4/26/11				
Direction Photo Taken: From the South					
Description: Tar Boil Excavations – High water levels					

PHOTOGRAPHIC LOG

Client Name:
National Fuel Gas Distribution Corp.

Site Location:
365 Mineral Springs Road, Buffalo, New York

Project No.
60137322

Photo No.
5

Date:
4/26/11

Direction Photo Taken:

From the West

Description:

Clay Cap – Sink holes



Appendix D

Institutional and Engineering Controls Certification Form



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



Site No.	Site Details	Box 1	
Site Name NFG - Mineral Springs MGP			
Site Address: 365 Mineral Springs Road Zip Code: 14210 City/Town: West Seneca County: Erie Site Acreage: 80.0			
Reporting Period: October 02, 2010 to October 02, 2011			
		YES	NO
1.	Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If NO, include handwritten above or on a separate sheet.			
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.			
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Box 2	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

Description of Institutional ControlsParcelOwnerInstitutional Control**123.16-2-8**

National Fuel Gas Distribution Corp.

Ground Water Use Restriction
Landuse Restriction**Description of Engineering Controls**ParcelEngineering Control**123.16-2-8**Cover System
Fencing/Access Control**Engineering Control Details for Site No. V00195****Parcel: 123.16-2-8**

- i. All identified capped areas shall continue to be protective of public health and the environment, and shall continue to be maintained and monitored to be consistent with industrial/commercial use.
- ii. The owner of the Property shall prohibit the Property from ever being used for purposes other than for an industrial/commercial operation, office, warehouse and garage facility and for the services associated with such use without the express written waiver of such prohibition by the Relevant Agency.
- iii. The owner of the Property shall prohibit the use of the groundwater underlying the Property without treatment rendering it safe for drinking water or industrial purposes, as appropriate, unless the user first obtains permission to do so from the Relevant Agency.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

IC CERTIFICATIONS
SITE NO. V00195

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Jay Wlesch at 365 Mineral Springs Rd Buffalo NY
print name print business address 14210

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

JB Jay Wlesch
Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

11/14/11
Date

IC/EC CERTIFICATIONS


Box 7

Professional Engineer Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Thomas P. Clark at AECOM, 250 Apollo Drive, Chelmsford, MA 01824,
print name print business address

am certifying as a Professional Engineer for the National Fuel Gas Distribution Company
(Owner or Remedial Party)



Signature of Professional Engineer, for the Owner or
Remedial Party, Rendering Certification



Stamp
(Required for PE)

Date

11/8/11